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CLAIMS

- An iRNA capable of selectively inhibiting the expression of an ANT isoform, characterized in that said iRNA is an RNA duplex, one of the strands being highly homologous to a fragment of the mRNA encoding said ANT isoform.
- 2. The iRNA as claimed in claim 1, characterized in that it is an siRNA of 18 to 25 nucleotides, more particularly of 21 nucleotides.
- 3. The iRNA as claimed in claim 2, characterized in that it has the sequence SEQ ID No. 1, SEQ ID No. 2 or SEQ ID No. 3.
 - 4. A construct containing at least one iRNA as claimed in any one of claims 1 to 3, or DNA sequences encoding each of the strands of these iRNAs.
- The construct as claimed in claim 4, characterized 5. in that the iRNA is associated with a vector that facilitates its administration, its passage across 25 membranes, tissues or biological integuments, in particular cytoplasmic membranes, mitochondrial nuclear membranes, skin, mucous membranes, walls, the blood-brain endothelial membranes, barrier, and also its bioavailability, stability and its pharmacodistribution, such as a 30 peptide, a liposome, nanoparticles (nanospheres, nanotubes), or a non-natural oligomer such as urea oligomers.
- 35 6. The construct as claimed in claim 4, characterized in that the vectors are vectors for transferring nucleic acids, such as retroviruses, transposons, adenoviruses or plasmids.

7. A pharmaceutical composition characterized in that it contains an effective amount of at least one iRNA as claimed in any one of claims 1 to 3, or a construct as claimed in any one of claims 4 to 6, in combination with a pharmaceutically acceptable vehicle.

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- 8. The pharmaceutical composition as claimed in claim 7, characterized in that it is in injectable form, or in a form that can be administered orally, parenterally, rectally or topically.
- 9. The iRNA as claimed in any one of claims 1 to 3, or the construct as claimed in any one of claims 1 to 6, or the pharmaceutical composition as claimed in claim 7 or 8, characterized in that it has the ability to regulate (to induce or to inhibit) mitochondrial membrane permeabilization and cell death of apoptotic, necrotic and autophagic type, and related mechanisms.